MODIS Technical Team Meeting
Thursday, September 11, 2003
GSFC Building 33, Room E125

Vince Salomonson chaired the meeting. In attendance were Barbara Conboy, Dorothy Hall, Bill Barnes, Wayne Esaias, Steve Kempler, Ed Masuoka, Eric Vermote, Bruce Ramsay, Chris Justice, and Jack Xiong, with Yolanda Harvey taking the minutes.

1.0 Upcoming Meetings

- MODIS Science Team Meeting, Baltimore-Washington International Airport (BWI) Marriott — POSTPONED – Date TBD
- 2003 Fall AGU Meeting. December 8-12, San Francisco, California, USA. Abstracts deadlines past.
  http://www.agu.org/meetings/fm03/

2.0 Meeting Minutes

2.1 General Discussion

Ramsay said that he received reports of offsets in MODIS imagery, and heard that the source was a geolocation problem; he was happy to see that the problem was resolved. Salomonson asked Ramsay if he and his colleagues had noticed that the direct broadcast coverage goes farther north now than previously because of the fires in the US and Canada? Ramsay said no, but that he would check with his operational people and let Salomonson know. Update: The NOAA/NESDIS/OSDPD operational wildfire team indicated that the NASA-NOAA MODIS NRT images and view of the U.S. to the Canadian border was the extent to which they track wildfires and that no changes were observed in this regard.

Ramsay reported that complete installation of a high-speed data link from NASA/GSFC to the NOAA facilities in Federal Building 4 in Suitland, MD, and the NOAA Science Center in Camp Springs, MD, may be somewhat delayed (it was scheduled for completion on 15 September 2003) due to difficulties experienced by the cable contractor.

Justice asked about the NOAA-N satellite accident in the Lockheed Martin facility in Sunnyvale, CA, and Ramsay said that there is an investigation team working on a report. Salomonson asked the extent of damage, and Ramsay read the NOAA/NESDIS weekly report entry on the accident: "NOAA, NASA, and Lockheed Martin to Investigate NOAA Satellite Accident: On September 6, while performing work that required a rotation of the NOAA-N Prime spacecraft being prepared to launch in 2008 for the NOAA, the satellite was damaged during an attempt to reposition it. Lockheed Martin (the contractor in charge of the construction and test of the satellite in Sunnyvale, CA), NASA, and NOAA have formed teams to investigate the accident and assess its impacts. NASA develops the Polar Orbiting Environmental Satellites (POES) for NOAA on a reimbursable basis. The Hill and OMB have been notified and NOAA and NASA prepared a press release. The first meeting of the NASA Mishap Investigation Board, of which NOAA and the USAF are members, will meet on September 12, and travel for on-site investigations September 16-18, 2003. It is too soon to estimate the impact on the launch schedule of this incident as well as the dollar amount of the damage caused to the spacecraft. The NOAA-N Prime

satellite value has been estimated at about $239 million including, contractor, NASA, and NOAA costs. The NOAA-N Prime spacecraft is vital to the continuity of the polar-orbiting environmental satellite program, which supports national interests in weather forecasting and warnings, climate services, oceans and a range of disasters such as fires." Esaias asked if anyone was injured, and Ramsay said no.

Salomonson addressed the issue of when to hold the next MODIS Science Team Meeting. He said that based on his understanding of when NASA HQ will be likely to proceed in announcing the results of proposals for this and other projects (many will likely not be announced until the end of October), he wondered whether we should still hold the Science Team Meeting at the end of October or wait on setting a date until HQ announces the results. He asked the opinions of those present at the Tech Team Meeting, and the general consensus was to cancel the Science Team Meeting until the proposal results are in. Esaias noted that a lot of people's budgets are tight at the moment – at least until the new funding is in place – so asking them to spend money to come to the STM is an obstacle to attendance. Salomonson agreed, and said that he would proceed to postpone the meeting and reschedule when definitive information on the selections is available. He will send out an explanatory email.

2.2 Instrument Status

Xiong reported that both instruments are running normally. He has received new test results from Chris Moeller of Wisconsin from the Terra DSM, and they will do a scan-by-scan test over a number of different granules and then try implementing it in the L1B/LUT. They are also waiting on input from Peter Minnett on Bands 31 and 32 RVS for the SST product, and if there is an improvement in the SST then they will apply the new RVS to these bands. He said that he hopes to be done with this before the October Science Team Meeting (now cancelled). Salomonson said that he thought Peter Minnet was interested in a MODIS/HIRS comparison of radiative transfer for SST, and Xiong replied that the DSM RVS was sent to him already for science test.

Xiong reported that the Oceans Aqua Calibration Workshop will take place next week. The Miami and SeaWiFS groups will all attend this meeting, as well as personnel from MCST.

2.3 DAAC

Kempler reported that the Goddard DAAC did an operating system upgrade on September 10, and they are back up and running again. As of Tuesday (September 9), there was a small backlog; the main obstacle is distribution, though Alcott has done a great job tweaking the system into performing well. The SIMBIOS distribution has been completed, which also helps. Salomonson said that he thought that Masuoka was doing the SIMBIOS distribution. Masuoka said that Mike Teague is still waiting to hear back from Bob Evans at Miami about transferring the Level 1A Ocean subset to them. Once that transfer is working well MODAPS will also send SIMBIOS the same data products, but is primarily focused on taking over the distribution to Miami (as Miami is a QA site). Masuoka said he needs to wait for the Oceans reprocessing to complete before tackling other issues that need to be addressed.

Kempler said that the backlog of orders to the public, which was at about 16 terabytes and is now at 13, is showing progress, though there are still short term and long-term

problems. Reducing the volume of products shipped to the MODIS Science Team for QA to the agreed upon baseline of 10% will take care of the short term; he said that he's still waiting to hear back from ESDIS, and he needs to get all the players involved to let NASA HQ know how important of an issue this is. The DAAC is managing the problem, but still needs long-term solutions. Salomonson asked if the Goddard DAAC needs hardware to meet the distribution needs of the public, and Kempler said yes, as well as software. They've always known that this was going to happen, though they didn't know what the exact magnitude would be. Masuoka said that Bob Evans will be able to turn some attention to the issue of receiving the Level 1A Ocean Subset for Q/A (see previous paragraph) once Ocean PGEs and RADCOR files have been delivered for the upcoming Ocean reprocessing. Sending the Level 1A subset to Miami and SIMBIOS from MODAPS will reduce the product volume shipped from the GES DAAC to the Science Team to the 10% of 1X, which is the current baseline.

2.4 MODAPS

Masuoka reported that Gary Alcott had given him a list of the times that data are complete for the Terra and Aqua MODIS golden months; Alcott had redone the list because they needed to find months without days of missing data in them.

Masuoka reported that Steve Fox is looking into splitting the forward processing from reprocessing and into separate pools in order to facilitate deleting a granule from a previous collection once the granule from the latest collection is in the archive.

Masuoka reported on distribution volumes for the Land review happening on September 12: the EDC distributes at 8TB per month, Goddard DAAC at 12TB per month, and the NSIDC at a much smaller level. Overall, distribution seems to be on an upward trend. Justice asked if these numbers account for the data pools, and Masuoka said no, that these volumes aren't captured in the reports generated from the EDGRS database. Salomonson asked how the data pools compare, and Kempler said that they are not at the level they would prefer, but they're still learning about them.

Masuoka reported that MODAPS is trying to juggle the hardware on the LDOPE system because the Land Q/A folks are running out of disk space. Disk space is more of an issue than they originally thought; they have perhaps one to two weeks before the problem becomes critical, though he was confident that they would work out a solution.

Masuoka said to Ramsay that he talked to Diane Wickland about producing an AVHRR/MODIS continuity product, and Wickland suggested that he ask NOAA if they had a representative who would be interested in serving in an advisory capacity in the effort to produce the continuity products. Masuoka said he would send an email to Ramsay asking if there was someone he would suggest for this role. Salomonson suggested Jim Tucker, and Masuoka replied that Tucker is already involved in an advisory capacity on the Reason CAN proposal. Justice said that he would email Kempler regarding the Reason CAN proposal that Kempler is a PI on.

2.5 Oceans

Esaias reported that he had some results of the analysis of the test 2 results; the analysis is going quite well, and shows significant improvement over Collection 4. The second test was better than the first; SST is showing much better coverage in the Arctic regions. He

said that he would hold a meeting on September 12 at 3 pm to discuss the results. There will be a formal presentation to NASA HQ later, and they would begin processing data on Wednesday or Thursday (September 17 or 18). Salomonson noted that the 412 nm bias stands out relative to SeaWiFS, and Esaias said that there is still an issue with satellite characterization that has resulted in a product improvement plateau. Consequently, it will take a while to improve quality relative to SeaWiFS; right now they are comparable. Whereas previously the two instruments had different calibration scenarios, codes, etc., this change has placed them on a level playing field.

Salomonson asked about reprocessing, asking that if they got stated on time, could they finish in mid- to late December? Esaias said yes. Salomonson asked if Land and Atmosphere were still to start Aqua reprocessing in January, and Oceans in March; Masuoka said yes.

Esaias said that he has sent the agenda out for the Oceans meeting; it is now available on their website.

2.6 Cryosphere

Hall reported that the snow albedo beta product will be out on September 14th and a couple of weeks later the sea ice global north and South Pole product (comparable to CMG) will come out. Esaias noted that this last product could have a role in the correction of earthshine, since it is done over the poles, and as such could be of use to the daily ocean products. Hall expressed interest and said that it should be possible.

3.0 Action Items

3.1 New Action Items

None.

3.2 Old Action Items

3.2.1 Tech Team to further discuss TRW using MODIS data for validation of the NPP/NPOESS production process.
Status: Open.

3.2.2 PIP to develop list of items to go into work plan for the new contract (EMD).
Status: Open.

3.2.3 Ed Masuoka to invite a NOAA delegate to the weekly MODIS Tech Team meetings or the PIP meetings.
Status: Open. Masuoka sent the invitation.

3.2.4 Kempler to bring back some proposals for how the disciplines can deal with the DAAC distribution problem.
Status: Open.